

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

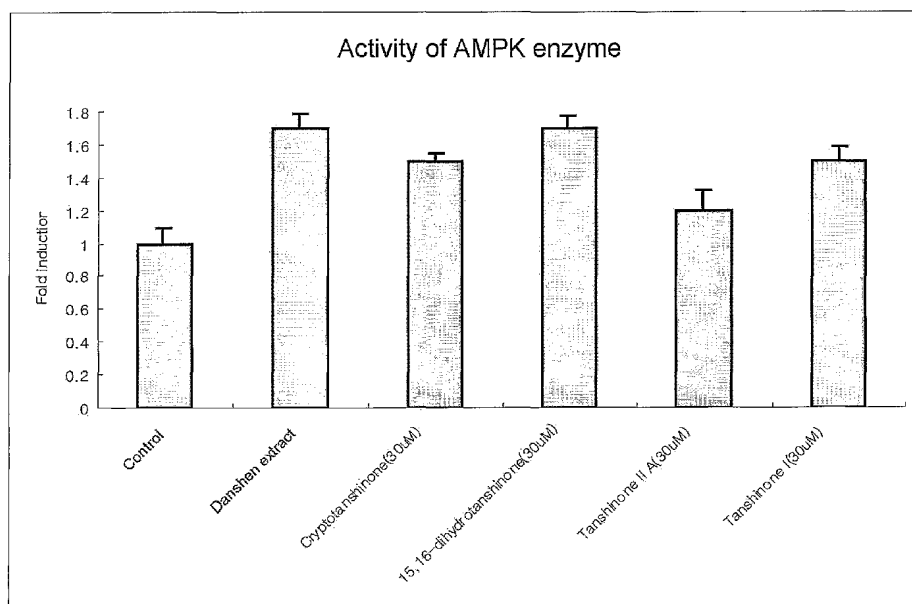
PCT

(10) International Publication Number
WO 2005/063232 A1

- (51) International Patent Classification⁷: **A61K 31/343**, 10-2004-0036197 21 May 2004 (21.05.2004) KR
35/78, A61P 3/04 10-2004-0050200 30 June 2004 (30.06.2004) KR
- (21) International Application Number: PCT/KR2004/003546 (71) Applicant (for all designated States except US): **MD BIOALPHA CO., LTD.** [KR/KR]; #1713, Honor's Ville, 1380-1, Dunsan-dong, Seo-gu, Daejeon 302-120 (KR).
- (22) International Filing Date: 30 December 2004 (30.12.2004) (72) Inventors; and (75) Inventors/Applicants (for US only): **KWAK, Tae-hwan** [KR/KR]; 103-503, Seogeunaemaoul SK Apt., Seocheon-ri, Giheung-eup, Yongin-si, Gyeonggi-do 449-906 (KR). **PARK, Myunggyu** [KR/KR]; 107-302, Seogeunaemaoul SK Apt., Seocheon-ri, Giheung-eup, Yongin-si, Gyeonggi-do 449-906 (KR).
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:
10-2003-0099658 30 December 2003 (30.12.2003) KR (74) Agent: **SOHN, Chang Kyu**; 1403, Seongji Heights 2-cha Bldg., 642-16, Yoksam 1-dong, Kangnam-gu, Seoul 135-910 (KR).
10-2003-0099657 30 December 2003 (30.12.2003) KR
10-2003-0099556 30 December 2003 (30.12.2003) KR (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
10-2003-0099557 30 December 2003 (30.12.2003) KR
10-2004-0036195 21 May 2004 (21.05.2004) KR

[Continued on next page]

(54) Title: OBESITY AND METABOLIC SYNDROME TREATMENT WITH TANSHINONE DERIVATIVES WHICH INCREASE METABOLIC ACTIVITY



(57) Abstract: The present invention relates to a composition for preventing and treating metabolic syndrome, containing tanshinone derivatives as an effective ingredient. More specifically, the present invention relates to a composition for preventing and treating metabolic syndrome, containing tanshinone derivatives that exhibit superior activity in enhancing metabolic activity, as an effective ingredient.



GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.